PATENT APPLICATION

RESPONSE UNDER 37 CFR §1.116 EXPEDITED PROCEDURE TECHNOLOGY CENTER ART UNIT 2852

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yoshiya TOMATSU Group Art Unit: 2852

Application No.: 10/799,585 Examiner: Q. GRAINGER

Filed: March 15, 2004 Docket No.: 119090

For: THERMAL FIXING DEVICE AND IMAGE FORMING APPARATUS WITH A

THERMAL FIXING DEVICE THAT INCLUDES A FIXING MEMBER, A FIRST PRESSING MEMBER AND A SECOND PRESSING MEMBER (AS AMENDED)

REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reply to the Office Action mailed April 30, 2008, the period for reply being extended by the attached Petition for Extension of Time, reconsideration of the above-identified application is respectfully requested. Claims 1-7, 21 and 26-30 are pending.

Applicant assumes that claims 28-30 recite allowable features because neither an objection or a rejection was made to claims 28-30.

Claims 1-7, 21, 26 and 27 were rejected under 35 U.S.C. §103(a) over JP-A-10-171283 (JP '283) in view of Kellie et al. (Kellie), U.S. Patent No. 6,954,607, Kosugi et al. (Kosugi), U.S. Patent No. 6,721,532, and Mohri et al. (Mohri), U.S. Patent No. 6,312,788. The rejections are respectfully traversed.

The combination of references fails to disclose or suggest all of the features recited in independent claims 1, 21, 26 and 27 because (1) Mohri suggests the opposite of the independent claims, (2) Mohri is not related to the independent claims, and (3) it would not have been reasonably predictable to combine features from four different references.

Applicant discusses each argument below.

(1) MOHRI SUGGESTS THE OPPOSITE OF THE INDEPENDENT CLAIMS

The combination of references fails to disclose or suggest a pressing force per unit area of the first pressing member that is configured to be larger than a pressing force per unit area of the second pressing member as called for by independent claims 1, 21, 26 and 27.

JP '283, Kellie and Kosugi fail to disclose the above feature and the Office Action does not assert that JP '283, Kellie and Kosugi disclose the above feature. The Office Action instead relies on Mohri to suggest the above feature. However, Mohri suggests the opposite of the independent claims. In other words, Mohri teaches away from, and discourages using the pressing force per unit area as called for by independent claims 1, 21, 26 and 27.

As noted on page 3 of the Office Action, Mohri is directed to an image forming apparatus that is capable of obtaining a satisfactory color development characteristic, transparency, surface smoothness and offset resistance (col. 7, lines 8-12). In order to improve smoothness and to effectively embed toner, Mohri states that the highest pressure is disposed in the downstream portion (i.e., second pressing member) such that heat can effectively be used to embed the toner in the image receiving layer (col. 42, lines 54-56). In order to support this, Mohri provides a Table 20 that illustrates why it is better for the pressing force per unit area of the second pressing member to be configured to be larger than the pressing force per unit of the first pressing member, which is the opposite of that which is claimed in independent claims 1, 21, 26 and 27. If the pressing force per unit area of the second pressing member is configured to be larger than the pressing force per unit area of the second

pressing member as called for by independent claims 1, 21, 26 and 27, then the proposed modification renders Mohri unsatisfactory for its intended purpose (and thus it would not have been reasonably predictable to use the pressure force per unit area as called for by claims 1, 21, 26 and 27).

Accordingly, even if one skilled in the art applied the teachings of Mohri to JP '283, Kellie and Kosugi for the reasons set forth in the Office Action and Mohri (which Applicant asserts would not have been obvious for the reasons discussed below), one skilled in the art would have made the pressing force per unit area of the second pressing member larger than the pressing force per unit area of the first pressing member. This is the opposite of independent claims 1, 21, 26 and 27. Therefore, the combination of references together fails to disclose or suggest all of the features recited in claims 1, 21, 26 and 27.

(2) MOHRI IS NOT RELATED TO THE INDEPENDENT CLAIMS

Mohri discloses a parameter suitable for a resin sheet such as an OHP (i.e., a resin sheet used in Example 3-1) to fix toner on a surface of the resin while smoothing the surface of the resin. As a result, Mohri is not related to a thermal fixing device that applies dry toner to a fixation medium as called for by independent claims 1, 21, 26 and 27. Thus, in view of Mohri's entire disclosure, Mohri's Example 3-9 discloses having the press contact portion having the highest pressure disposed in the downstream portion (which is the opposite of claims 1, 21, 26 and 27) such that heat can effectively be used under the condition of improving the fixing characteristic of the toner.

Therefore, Applicant asserts that Mohri is unrelated to the claimed invention and that one of ordinary skill in the relevant art would not use Mohri to achieve the features of independent claims 1, 21, 26 and 27. Therefore, Applicant asserts that only improper hindsight reconstruction could have been used to apply the teachings of Mohri to independent claims 1, 21, 26 and 27.

(3) IT WOULD NOT HAVE BEEN REASONALBY PREDICTABLE TO COMBINE FEATURES FROM FOUR DIFFERENT REFERENCES

The claimed invention is not reasonably predictable from the combination of all of JP '283, Kellie, Kosugi and Mohri. The Office Action proposes to rearrange the parts of JP '283, Kellie, Kosugi and Mohri without providing the requisite reason why a person of ordinary skill in the art, without the benefit of Applicant's specification, would have rearranged the parts. See MPEP §2144.04(VI.C). Applicant provides the following examples.

As discussed above, page 3 of the Office Action conclusorily asserts that it would have been obvious to use Mohri with the image forming apparatus of JP '283 in order to obtain surface smoothness and to prevent offsetting. However, attempting to fix toner on a surface of resin does not appear to be relevant to JP '283. In addition, there are various known methods of obtaining surface smoothness and preventing offsetting, none of which suggest using Mohri.

Page 3 of the Office Action also conclusorily asserts that it would have been obvious to use Kellie with JP '283 in order to set an appropriate temperature, and that it would have been obvious to use Kosugi's dry toner to achieve other various advantages. Applicant again disagrees with the reasoning provided in the Office Action, at least because there are various ways to set an appropriate temperature and there are various ways to, for example, obtain a satisfactory nip width by a thin fixing roller, none of which suggest the teachings of Kellie or Kosugi.

In addition, a statement that modifications of the prior art to meet the claimed invention would have been well within the capabilities of one of ordinary skill in the art at the time the claimed invention was made, because the references relied upon teach that all aspects of the claimed invention were individually known in the art, is not sufficient to establish a

prima facie case of obviousness without some objective reason to combine the teachings of the references. See MPEP §2143(IV). The Office Action's simple recitation of the objectives of each prior art reference fails to articulate an adequate rationale for combining individual pieces of structure from each of JP '283, Kellie, Kosugi and Mohri in order to reconstruct claims 1, 21, 26 and 27. See MPEP §§2141-2143. The Office Action fails to confirm the adequacy for combining all four references.

Furthermore, it is improper to combine all of JP '283, Kellie, Kosugi and Mohri in order to suggest the above features of claims 1, 21, 26 and 27 because such combination involves impermissible hindsight using knowledge gleaned only from Applicant's disclosure. Such hindsight reconstruction of the claimed invention is improper. See MPEP §2145(X)(A). A large number of thermal fixing devices exist with a wide range of structure. There appears to be no logical reason for one of ordinary skill in the art to seek out and combine individual pieces of structure from each of JP '283, Kellie, Kosugi and Mohri in order to reconstruct claims 1, 21, 26 and 27. The claimed combination would not have been obvious to try because there was not a finite number of identified, predictable potential solutions to a recognized problem or need. See MPEP §§2143(E) and 2143.02. Applicants assert that, given the circumstances, knowledge gleaned only from Applicant's disclosure was used, which is impermissible hindsight.

* * * * *

In view of the above, it is respectfully requested that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff

Registration No. 27,075

Scott M. Schulte

Registration No. 44,325

JAO:SMS/eks

Attachment:

Petition for Extension of Time

Date: September 2, 2008

OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, Virginia 22320-4850 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461